

AMENDMENTS TO THE CLAIMS

- 1 1. (Currently Amended) A method comprising:
2 receiving a database statement that
3 ~~makes a change~~ specifies a DML operation that ~~causes a loss of~~ modifies
4 data in one or more columns in a database, and
5 contains a clause that specifies an aggregate operation to be performed on
6 a plurality of values associated with the ~~change~~ data; and
7 in response to receiving the database statement,
8 performing the DML operation on the one or more columns in the
9 database,
10 performing the aggregate operation on the plurality of values, and
11 returning as a result of the database statement a result of the aggregate
12 operation.

- 1 2. (Currently Amended) The method of claim 1, wherein the performing of the
2 aggregate operation is performed while performing the ~~change~~ DML operation.

- 1 3. (Currently Amended) The method of claim 1, wherein the ~~[[loss of]]~~ modified
2 data includes values of the data before the ~~change~~ DML operation.

- 1 4. (Currently Amended) The method of claim 1, wherein the ~~[[loss of]]~~ modified
2 data includes values of the data after the ~~change~~ DML operation.

- 1 5. (Currently Amended) The method of claim 1, wherein the ~~change~~ DML operation
2 is an update of the data.

- 1 6. (Currently Amended) The method of claim 1, wherein the ~~change~~ DML operation
2 is a deletion of the data.

- 1 7. (original) The method of claim 1, wherein the receiving is performed by an SQL
2 engine.

- 1 8. (original) The method of claim 1, wherein results of the aggregate operation are
2 passed from an SQL engine to a server side stub without passing the data in its
3 entirety.
- 1 9. (original) The method of claim 8, wherein results of the aggregate operation are
2 passed from an SQL engine to a client interface without passing the data in its
3 entirety.
- 1 10. (original) The method of claim 1, where the database statement is sent from a
2 client interface.
- 1 11. (original) The method of claim 1, wherein the database statement contains
2 multiple aggregate operations.
- 1 12. (original) The method of claim 11, wherein performing includes:
2 parsing the database statement;
3 establishing a list of operator trees, each operator tree corresponding to a different
4 aggregate function; and
5 establishing an aggregate function list including structures pointing to work
6 spaces for performing the aggregate functions.
- 1 13. (original) The method of claim 1, wherein:
2 the receiving of the database statement is performed via a call interface;
3 the performing of the aggregate operation generates an aggregate value; and
4 the method further includes passing the aggregate value through the call interface
5 without passing the plurality of values.
- 1 14. (Currently Amended) [[A]] The method comprising of claim 1, wherein:
2 receiving a the database statement that makes a change that causes a loss of data;
3 and further contains a return clause that indicates which old values
4 involved in said change are to be changed associated with the data; and

in response to receiving the database statement, performing the change and
 returning multiple values that were involved in said change the step of
 performing the aggregate operation on the plurality of values includes
 performing the aggregate operation on the old values.

15. (Currently Amended) A ~~system comprising~~ computer readable medium ~~carrying~~
 storing a set of instructions which, when executed by one or more ~~for causing a~~
 processors, causes the one or more processors to perform a method including at
 least:
 receiving a database statement that
~~makes a change~~ specifies a DML operation that ~~causes a loss of~~ modifies
data in one or more columns in a database, and
 contains a clause that specifies an aggregate operation to be performed on
 a plurality of values associated with the ~~change~~ data; and
 in response to receiving the database statement,
performing the DML operation on the one or more columns in the
database,
 performing the aggregate operation on the plurality of values, and
 returning as a result of the database statement a result of the aggregate
 operation.

16. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
 wherein the performing of the aggregate operation is performed while performing
 the ~~change~~ DML operation.

17. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
 wherein the ~~[[loss of]]~~ modified data includes values of the data before the ~~change~~
DML operation.

18. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
 wherein the ~~[[loss of]]~~ modified data includes values of the data after the ~~change~~
DML operation.

- 1 19. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
2 wherein the ~~change~~ DML operation is an update of the data.
- 1 20. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
2 wherein the ~~change~~ DML operation is a deletion of the data.
- 1 21. (Currently Amended) The ~~system~~ computer-readable medium of claim 15 further
2 comprising a computer that accesses the computer readable medium.
- 1 22. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
2 wherein the clause contains multiple aggregate operations.
- 1 23. (Currently Amended) The ~~system~~ computer-readable medium of claim 22,
2 wherein performing includes
3 parsing the database statement;
4 establishing a list of operator trees, each operator tree corresponding to a different
5 aggregate function; and
6 establishing an aggregate function list including structures pointing to work
7 spaces for performing the aggregate functions.
- 1 24. (Currently Amended) The ~~system~~ computer-readable medium of claim 15,
2 wherein:
3 the receiving of the database statement is performed via a call interface;
4 the performing of the aggregate operation generates an aggregate value; and
5 the method further includes passing the aggregate value through the call interface
6 without passing the plurality of values.
- 1 25. (Currently Amended) ~~A system comprising~~ The computer readable medium ~~carrying~~
2 ~~instructions for causing a processor to perform a method including at least of claim~~
3 15, wherein:

4 ~~receiving a~~ the database statement ~~that makes a change that causes a loss of data, and~~
5 further contains a return clause that indicates ~~which~~ old values ~~involved in~~
6 ~~said change are to be changed~~ associated with the data; and
7 ~~in response to receiving the database statement, performing the change and returning~~
8 ~~multiple values that were involved in said change~~ the step of performing the
9 aggregate operation on the plurality of values includes performing the
10 aggregate operation on the old values.